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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Shashank Sharma and )  
Mahendra Kumar Sunkara )

Filed: June 29, 2001

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Serial No: 09/896,834

For: LOW TEMPERATURE SYNTHESIS OF )  
SEMICONDUCTOR FIBERS )

Atty. Docket No.: AD138/2001 )

Assistant Commissioner of Patents  
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(Signature)

## INFORMATION DISCLOSURE STATEMENT

Dear Sir:

Enclosed is a list and copies of references considered by Applicant to be pertinent in the examination of the above-identified patent application.

U.S. Patent 5,725,674 by Moustakas et al. for a 'Device and Method for Epitaxially Growing Gallium Nitride Layers' issued in March of 1998;

U.S. Patent 6,051,849 by Davis et al. for a 'Gallium Nitride Semiconductor Structures Including a Lateral Gallium Nitride Layer that Extends from an Underlying Gallium Nitride Layer issued in April of 2000;

U.S. Patent 5,858,862 by Westwater for 'Process for Producing Quantum Fine Wire' issued in January of 1999';

U.S. Patent 5,962,863 by Russell for a 'Laterally Disposed Nanostructures of Silicon on an Insulating Substrate' issued in October of 1999;

U.S. Patent 5,381,753 by Okajima for a 'Fabrication Method for Fine Structures' issued in January of 1995;

U.S. Patent 4,886,683 by Hoke et al. for a 'Low Temperature Metalorganic Chemical Vapor Deposition Growth of Group II-VI Semiconductor Materials' issued in December of 1989;

U.S. Patent 5,334,296 by Henkens et al. for a 'Peroxidase Colloidal Gold Oxidase Biosensors for Mediatoreless Glucose determination' issued in August of 1994;

U.S. Patent 6,033,866 by Guo for a 'Highly Sensitive Amperometric Bi-mediator-based Glucose Biosensor' issued in March of 2000;

U.S. Patent 5,922,183 by Rauh for a Metal Oxide Matrix Biosensors' issued in July of 1999;

U.S. Patent 6,063,246 by Wolfe et al. for a 'Method for Depositing a Carbon film on a Membrane, issued in May of 2000;

Abstract of PCT Publication WO9944224A1 by Davis et al. for 'Methods of Fabricating Gallium Nitride Semiconductor Layers by Lateral Overgrowth Through Masks, and Gallium Nitride Semiconductor Structures Fabricated Thereby' publication date September of 1999;

Abstract of PCT Publication WO026422A1 by Yamamura et al. for a 'High Purity gallium for Preparation of Compound Semiconductor, and Method and Apparatus for Purifying the Same' published May 11, 2000;

Abstract of PCT Publication WO9965068A1 by Zheleva et al. for a 'Fabrication of Gallium Nitride Semiconductor Layers by Lateral Growth from Trench Sidewalls' published December of 1999;

Abstract of Japanese Patent JP 2086121A2 by Toru and Toshiyuki for a 'Device for Vapor Growth Semiconductor' issued in March of 1990;

Abstract of Japanese Patent JP 11177134A2 by Takeshi for a 'Manufacture Semiconductor, Manufacture of Light Emitting Element, and Light Emitting Element' issued in July of 1999;

Zhang et al., 'One-dimensional growth mechanism of crystalline silicon nanowires' *Journal of Crystal Growth* 197 (1999) 136-140;

Westwater et al. 'Growth of silicon nanowires via gold/silane vapor-liquid-solid reaction' *J. Vac. Sci. Technol. B*, 15(3) 554-557 May/Jun 1997;

Morales et al. 'A Laser Ablation Method for the synthesis fo Crystalline Semiconductor Nanowires' *Science* Vol. 279, pp 208-211, January 9, 1998;

Yan et al. 'Growth of amorphous silicon nanowires via a solid-liquid-solid mechanism' *Chemical Physics Letters* 323 (2000) 224-228;

Gole et al. 'Direct synthesis fo silicon nanowires, silica nanospheres, and wire-like nanosphere agglomerates, *Applied Physics Letters*, Volume 76, Number 17, pp. 2346-2348. April 24, 2000;

Holmes et al. 'Control of Thickness and Orientation of Solution-Grown Silicon Nanowires' *Science* Vol 287, February 25, 2000, pp.14711473;

Scheier et al. 'Growth of silicon nanostructures on graphite' *Surface Science* 458 (2000) 113-122;

Yu et al. 'Nanoscale Silicon Wires Synthesized Using Simple Physical Evaporation' *Applied Physics Letters*, Volume 72, Number 26, June 29, 1998, pp. 3458-3460, June 29, 1998;

Zhang et al. 'Silicon nanowires prepared by Laser ablation at High Temperature', *Applied Physics Letters*', Volume 72, Number 15, pp. 1835-1837, April 13, 1998;

Yu et al. 'Controlled Growth of Oriented Amorphous Silicon Nanowires via a Solid-Liquid-solid (SLS) Mechanism' *Physica E* 9 (2001) 305-309;

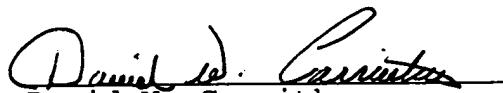
Lieber, 'OneDimensional Nanostructures: Chemistry, Physics, and Applications, *Solid State Communications* 1998, Vol. 107, No. 11, pp 607-616;

Sharma et al. 'Novel Vapor-Liquid-Solid synthesis Method for Carbon Nanowires' presented on CD and at Carbon 2001 Conference at the University of Kentucky, Lexington, KY in July of 2001;

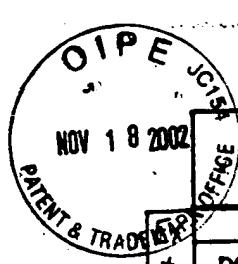
Zhang et al. 'Morphology and growth mechanism study of self-assembled silicon nanowires synthesized by thermal evaporation' *Chemical Physics Letters* 337 (2001) 18-24, March 30, 2001; and

Wu et al. Germanium Nanowire Growth via Simple Vapor Transport', *Chem. Mater.* 2000, 12, 605-607.

Respectfully submitted,



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**U. S. PATENT DOCUMENTS**

* DOCUMENT NUMBER	DATE	NAME	CLASS*	SUB-CLASS*	FILING DATE IF APPRO.
5725674	3/10/98	Moustakas et al.			
6051849	4/18/00	Davis et al.			
5858862	1/12/99	Westwater et al.			
5962863	10/5/99	Russell et al.			
5381753	1/17/95	Okajima et al.			
6063246	5/16/00	Wolfe et al.			
4886683	12/12/89	Hoke et al.			
5334296	8/2/94	Henkens et al.			
6033866	3/7/00	Guo et al.			
5922183	7/13/99	Rauth			

\* Supply data if known.

**FOREIGN PATENT DOCUMENTS**

* DOCUMENT NUMBER	DATE	COUNTRY	NAME	CLASS*	SUB-CLASS*	PERTINENT SHTS PP DWG SPL
2086121	3/27/90	Japan	Nishibe Toru et al.			
11177134	7/2/99	Japan	Yamada Takeshi			

\* OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

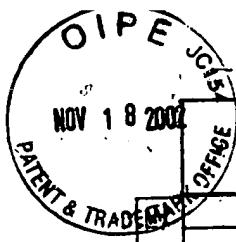
Publication No. WO026422A1 for "HIGH PURITY GALLIUM FOR PREPARATION OF COMPOUND SEMICONDUCTOR, AND METHOD AND APPARATUS FOR PURIFYING THE SAME" by Yamamura et al., published on May 11, 2000;

Publication No. WO9965068A1 for "FABRICATION OF GALLIUM NITRIDE SEMICONDUCTOR LAYERS BY LATERAL GROWTH FROM TRENCH SIDEWALLS" by Zheleva et al., published on December 16, 1999;

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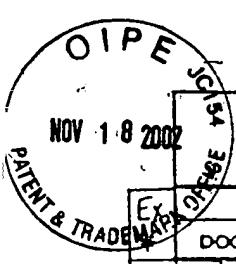
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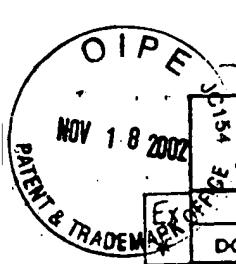
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